

UPX3351 Metal Capacitive Differential Pressure Sensor

Description

UPX3351 metallic capacitive pressure sensor uses two plate capacitors as sensitive elements. The sensor is a complete welded-sealing module, the processing pressure is transmitted to the diaphragm of sensitive element through isolated diaphragm and filled silicon oil, to cause the capacity boards displacement to change, thus makes the changes of capacitive signal.

UPX3351 can output capacitance signal directly, simultaneously the amplified circuit can also be installed in sensor's neck, to make it have $4\sim20\text{mA}$ standard output signal.

UPX3351 is widely used in drugs manufacturing, food industry as well as environmental protection etc.



Features

- All-welded structure, suitable for measuring many kinds of media
- Isolated diaphragm material: 316L, Hustelloy-C, Monel, Tantalum
- Measuring ranges: -100...0kPa~1.6kPa...40MPa
- System pressure up to 312bar for differential applications
- Pressure type: gauge pressure, absolute pressure, micro differential pressure and differential pressure



sensor with flange

Specifications

pressure medium	gas or liquids compatible with 316L, Hastelloy-C, Tantalum or Monel				
pressure ranges	-1000kPa~1.6kPa40000kpa				
pressure type	gauge(G), absolute(A), differential(D)				
system pressure	10MPa for differential pressure, 4MPa for micro differential pressure 32MPa for high system pressure differential pressure,				
output signal	capacitive signal or 4~20mA				
accuracy	±0.2%FS(standard),0.5%FS				
long-term stability	<0.2%FS/year				
system pressure effect on zero	0.5%FS				
operating temperature range	-40~+100°C				
storage temperature range	-40~+120°C				
temperature coefficient of zero	0.25%FS/55°C				
temperature coefficient of span	0.5%FS/55°C				
insulation resistance	500MΩ@100VDC				
diaphragm material	316L, option: Hastelloy-C, Tantalum or Monel				
electrical interface	5 colored PVC wires of differential capacitive signal and temperature signal 2 colored PVC insulated wires of 4~20mA current loop				
filled oil	silicone oil				

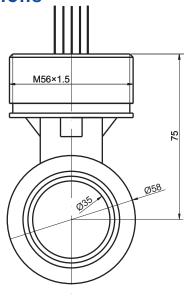
Xi'an UTOP Measurement Instrument Co., Ltd. Tel.: +86-29-8918 1790 Fax: +86-29-8918 1792

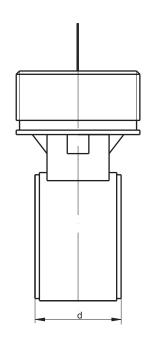
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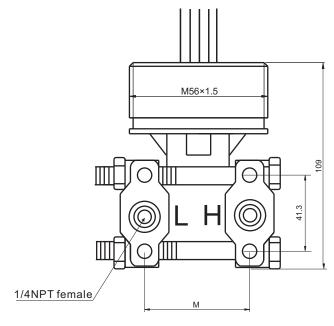
Dimensions





thickness of UPX3351

range	2345	6	7	8	9 0
d(mm)	35.6	37.0	37.4	39.0	40.1



range code	2,3,4,5	6	7	8	9 0
M(mm)	54	55.4	55.8	57.4	58.5

Electrical connection

<u>connection</u>

High pressure side Low pressure side

common black

temp. signal"+" temp. signal"-"

green blue

cable color

red

white

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Ordering code

UPX335	1									
	code	pressure range & type								
	2	0~0.161kPa for VDP(very low differential pressure transmitter)								
	3	0~1	0~16kPa for DP(differential pressure transmitter), GP(gauge pressure transmitter)							
	4	0~6	0~640kPa for DP, GP, AP(absolute pressure transmitter), HDP (high system pressure transmitter)							
	5		0~40200kPa for DP, GP, AP, HDP							
	6	0~0.1	0~0.161MPa for DP, GP, AP, HDP							
	7		0~0.42.5MPa for DP, GP, AP, HDP							
	8			for DP,	GP, AP					
	9		20MPa							
	0		40MPa			ar diffaran	itial pressure t	ranamittar		
		coae 1		a for V		orallieren	itiai pressure t	ransmiller)	
		4		a for V						
		10		Pa for I						
		25								
		32		32MPa for HDP						
			code	flang						
			Υ	need	d flange					
			N	no ne	eed flange					
				code	output					
				Ос	differential capacitive signal and temperature signal					
				01	4~20mA(HART protocol option)					
					mater				T	
					code	_	exhaust valve	code	diaphragm	
					31	304SS,3		12	316L SS	
					32 316SS, 316SS 13 Hastelloy-C					
								14	Tantalum	
		15 Monel								
UPX335	1 5	10	Υ	Ос	31 12					

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